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**What is Claimed is:**

1. A genetic construct comprising a cDNA for an ABC reporter gene linked to a cDNA for a reporter gene under regulation of a proximal promoter region of the reporter gene.

5        2. The construct of claim 1 wherein the ABC reporter protein cDNA is human CFTR coding region and a cDNA of a EGFP reporter gene linked at the 5' end to the human CFTR cDNA coding region and wherein said cDNAs are under the regulation of the proximal human CFTR promoter region.

10       3. The construct of claim 1 wherein the ABC reporter protein cDNA is human Pgp cDNA coding region linked to a cDNA for a reporter gene under the regulation of the proximal human MDR1 promoter region.

15       4. The construct of claim 2 wherein the human CFTR cDNA is a mutant CFTR.

5. The construct of claim 4 wherein the mutant CFTR is  $\Delta F508$ .

6. A cell line transfected with the genetic construct of claim 1.

20       7. A method for assessing the ability of antineoplastic agents to induce multi-drug resistance in tumor cells comprising:

(a) exposing cells transfected with the construct of claim 1 wherein the construct comprises a human Pgp cDNA coding region linked to a cDNA for a reporter gene under the regulation of a proximal human MDR1 promoter region to an antineoplastic agent; and

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(b) monitoring MDR1 gene transcription in the cells and Pgp protein trafficking to the surface of the cells wherein an

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increase in both *MDR1* gene transcription in the cells and Pgp protein trafficking to the surface of the cells is indicative of the agent inducing a multi-drug resistant phenotype in tumor cells.

5           8. A method for identifying agents which alter the *de novo* multi-drug resistant phenotype of tumor cells comprising:

(a) contacting cells transfected with a construct of claim 1 wherein said construct comprises a human *Pgp* cDNA coding region linked to a cDNA for a reporter gene under the  
10 regulation of the proximal human *MDR1* promoter region with an agent;

(b) monitoring *MDR1* gene transcription in the cells and Pgp protein trafficking to the surface of the cells, wherein a decrease in *MDR1* gene transcription in the cells or Pgp  
15 protein trafficking to the cell surface is indicative of an agent which is useful in inhibiting the *de novo* multi-drug resistant phenotype of some tumor cells.

9. A method for identifying agents for use in the treatment of cystic fibrosis comprising:

20           (a) exposing cells transfected with the genetic construct of claim 4 to an agent;

(b) measuring CFTR expression levels or trafficking of CFTR to the cell membrane in the exposed cells; and

(c) comparing measured CFTR expression levels or  
25 trafficking of CFTR to the cell membrane in the exposed cells to CFTR expression levels or trafficking of CFTR to the cell membrane in cells not exposed to the agent, wherein an increase in CFTR expression levels or trafficking of CFTR to the cell membrane in the exposed cells as compared to the  
30 unexposed cells is indicative of the agent being useful in the treatment of cystic fibrosis.

10. A method of treating cystic fibrosis in a patient

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comprising systemically administering to a patient with cystic fibrosis an agent identified by the method of claim 9.

11. The method of claim 10 wherein the agent comprises an anthracycline drug, derivative or metabolite.